

Title (en)  
Immunostimulatory Combinations

Title (de)  
Immunstimulatorische Kombinationen

Title (fr)  
Combinaisons immunostimulantes

Publication  
**EP 2572715 A1 20130327 (EN)**

Application  
**EP 12174376 A 20031230**

Priority  

- EP 03800433 A 20031230
- US 43739802 P 20021230

Abstract (en)  
The present invention provides immunostimulatory combinations. Generally, the immunostimulatory combinations include a TLR agonist and a TNF/R agonist. Certain immunostimulatory combinations also may include an antigen.

IPC 8 full level

**A61K 31/435** (2006.01); **A61K 31/4745** (2006.01); **A61K 38/08** (2019.01); **A61K 38/16** (2006.01); **A61K 38/17** (2006.01); **A61K 39/39** (2006.01); **A61K 45/06** (2006.01); **C07K 14/705** (2006.01); **C07K 16/00** (2006.01); **C12N 5/07** (2010.01); **C12N 5/0783** (2010.01); **C12N 5/09** (2010.01); **A61K 39/00** (2006.01)

CPC (source: EP US)  
**A61K 31/4745** (2013.01 - EP US); **A61K 31/5377** (2013.01 - EP US); **A61K 31/7084** (2013.01 - EP US); **A61K 31/7115** (2013.01 - EP US); **A61K 31/739** (2013.01 - EP US); **A61K 38/08** (2013.01 - EP US); **A61K 38/10** (2013.01 - EP US); **A61K 38/164** (2013.01 - EP US); **A61K 39/0002** (2013.01 - US); **A61K 39/0011** (2013.01 - EP US); **A61K 39/02** (2013.01 - US); **A61K 39/12** (2013.01 - US); **A61K 39/39** (2013.01 - EP US); **A61K 39/39541** (2013.01 - EP US); **A61K 39/3955** (2013.01 - US); **A61K 45/06** (2013.01 - EP US); **A61P 7/00** (2018.01 - EP); **A61P 11/06** (2018.01 - EP); **A61P 17/00** (2018.01 - EP); **A61P 17/02** (2018.01 - EP); **A61P 17/14** (2018.01 - EP); **A61P 25/00** (2018.01 - EP); **A61P 27/16** (2018.01 - EP); **A61P 31/00** (2018.01 - EP); **A61P 31/04** (2018.01 - EP); **A61P 31/10** (2018.01 - EP); **A61P 31/12** (2018.01 - EP); **A61P 31/16** (2018.01 - EP); **A61P 31/18** (2018.01 - EP); **A61P 31/20** (2018.01 - EP); **A61P 31/22** (2018.01 - EP); **A61P 33/00** (2018.01 - EP); **A61P 33/02** (2018.01 - EP); **A61P 35/00** (2018.01 - EP); **A61P 35/02** (2018.01 - EP); **A61P 37/00** (2018.01 - EP); **A61P 37/02** (2018.01 - EP); **A61P 37/04** (2018.01 - EP); **A61P 37/08** (2018.01 - EP); **A61P 43/00** (2018.01 - EP); **A61K 2039/505** (2013.01 - US); **A61K 2039/55511** (2013.01 - EP US); **A61K 2039/55516** (2013.01 - US); **A61K 2039/55561** (2013.01 - EP US); **A61K 2039/55572** (2013.01 - EP US); **A61K 2039/572** (2013.01 - US); **A61K 2039/585** (2013.01 - US); **Y02A 50/30** (2018.01 - EP)

C-Set (source: EP US)

1. **A61K 31/4745 + A61K 2300/00**
2. **A61K 39/39541 + A61K 2300/00**

Citation (applicant)

- US 6039969 A 20000321 - TOMAI MARK A [US], et al
- US 6200592 B1 20010313 - TOMAI MARK A [US], et al
- US 4689338 A 19870825 - GERSTER JOHN F [US]
- US 5446153 A 19950829 - LINDSTROM KYLE J [US], et al
- US 6194425 B1 20010227 - GERSTER JOHN F [US], et al
- US 6110929 A 20000829 - GERSTER JOHN F [US], et al
- US 6194388 B1 20010227 - KRIEG ARTHUR M [US], et al
- US 43265002 P 20021211
- US 43265102 P 20021211
- US 6518265 B1 20030211 - KATO HIDEO [JP], et al
- US 4929624 A 19900529 - GERSTER JOHN F [US], et al
- US 4988815 A 19910129 - ANDRE JEAN-DENIS [US], et al
- US 5037986 A 19910806 - GERSTER JOHN F [US]
- US 5175296 A 19921229 - GERSTER JOHN F [US]
- US 5238944 A 19930824 - SCHULTZ HELEN J [US], et al
- US 5266575 A 19931130 - GERSTER JOHN F [US], et al
- US 5268376 A 19931207 - GERSTER JOHN F [US]
- US 5346905 A 19940913 - GERSTER JOHN F [US]
- US 5352784 A 19941004 - NIKOLAIDES NICK [US], et al
- US 5367076 A 19941122 - GERSTER JOHN F [US]
- US 5389640 A 19950214 - GERSTER JOHN F [US], et al
- US 5395937 A 19950307 - NIKOLAIDES NICK [US], et al
- US 5482936 A 19960109 - LINDSTROM KYLE J [US]
- US 5693811 A 19971202 - LINDSTROM KYLE J [US]
- US 5741908 A 19980421 - GERSTER JOHN F [US], et al
- US 5756747 A 19980526 - GERSTER JOHN F [US]
- US 5939090 A 19990817 - BEAURLINE JOSEPH M [US], et al
- US 6083505 A 20000704 - MILLER RICHARD L [US], et al
- US 6245776 B1 20010612 - SKWIERCZYNSKI RAYMOND D [US], et al
- US 6331539 B1 20011218 - CROOKS STEPHEN L [US], et al
- US 6376669 B1 20020423 - RICE MICHAEL J [US], et al
- US 6451810 B1 20020917 - COLEMAN PATRICK L [US], et al
- US 6525064 B1 20030225 - DELLARIA JOSEPH F [US], et al
- US 6545016 B1 20030408 - DELLARIA JOSEPH F [US], et al
- US 6545017 B1 20030408 - DELLARIA JOSEPH F [US], et al
- US 6558951 B1 20030506 - TOMAI MARK A [US], et al
- US 6573273 B1 20030603 - CROOKS STEPHEN L [US], et al
- EP 0394026 A1 19901024 - RIKER LABORATORIES INC [US]

- US 2002055517 A1 20020509 - SMITH MICHAEL H [US]
- WO 0174343 A2 20011011 - 3M INNOVATIVE PROPERTIES CO [US]
- WO 0246188 A2 20020613 - 3M INNOVATIVE PROPERTIES CO [US], et al
- WO 0246189 A2 20020613 - 3M INNOVATIVE PROPERTIES CO [US], et al
- WO 0246190 A2 20020613 - 3M INNOVATIVE PROPERTIES CO [US], et al
- WO 0246191 A2 20020613 - 3M INNOVATIVE PROPERTIES CO [US], et al
- WO 0246192 A2 20020613 - 3M INNOVATIVE PROPERTIES CO [US], et al
- WO 0246193 A2 20020613 - 3M INNOVATIVE PROPERTIES CO [US], et al
- WO 0246749 A2 20020613 - 3M INNOVATIVE PROPERTIES CO [US], et al
- WO 02102377 A1 20021227 - 3M INNOVATIVE PROPERTIES CO [US], et al
- WO 03020889 A2 20030313 - 3M INNOVATIVE PROPERTIES CO [US]
- WO 03043572 A2 20030530 - 3M INNOVATIVE PROPERTIES CO [US]
- WO 03045391 A1 20030605 - 3M INNOVATIVE PROPERTIES CO [US]
- US 6376501 B1 20020423 - ISOBE YOSHIAKI [JP], et al
- US 6028076 A 20000222 - HIROTA KOHSAKU [JP], et al
- US 6069149 A 20000530 - NANBA RYOUICHI [JP], et al
- US 6387938 B1 20020514 - MIZUGUCHI KIYOSHI [JP], et al
- US 6329381 B1 20011211 - KURIMOTO AYUMI [JP], et al
- WO 02085905 A1 20021031 - JAPAN ENERGY CORP [JP], et al
- US 6207646 B1 20010327 - KRIEG ARTHUR M [US], et al
- US 6239116 B1 20010529 - KRIEG ARTHUR M [US], et al
- US 6339068 B1 20020115 - KRIEG ARTHUR M [US], et al
- US 6406705 B1 20020618 - DAVIS HEATHER L [CA], et al
- US 6426334 B1 20020730 - AGRAWAL SUDHIR [US], et al
- US 6476000 B1 20021105 - AGRAWAL SUDHIR [US]
- WO 0075304 A1 20001214 - AVENTIS PASTEUR [FR], et al
- KEDL ET AL., JEM, vol. 192, no. 8, 2000, pages 1105 - 1113
- KEDL ET AL., PNAS, vol. 98, no. 19, pages 10811 - 10816

Citation (search report)

- [E] EP 1550458 A1 20050706 - VECTRON THERAPEUTICS AG [DE]
- [XP] WO 03045431 A2 20030605 - SCHERING CORP [US]
- [Y] US 5708142 A 19980113 - GOEDDEL DAVID V [US], et al
- [YD] US 6039969 A 20000321 - TOMAI MARK A [US], et al

Cited by

EP3281641A4; US10537626B2; US11304997B2; US10526388B2; US10590179B2; US10875900B2; US10842848B2; US11491204B2; US11291718B2; US11759518B2; TW1738646B

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

**US 2004141950 A1 20040722; US 7387271 B2 20080617;** AU 2003300184 A1 20040729; AU 2003300184 B2 20090806;  
AU 2003300184 B8 20091203; CA 2511538 A1 20040722; CA 2511538 C 20131126; EP 1578419 A2 20050928; EP 1578419 A4 20081112;  
EP 2572714 A1 20130327; EP 2572715 A1 20130327; JP 2006512391 A 20060413; JP 2011016811 A 20110127; JP 2011105749 A 20110602;  
JP 2014101371 A 20140605; US 10105426 B2 20181023; US 2009123460 A1 20090514; US 2011002946 A1 20110106;  
US 2011280903 A1 20111117; US 2013115228 A1 20130509; US 2016129095 A1 20160512; US 2019083592 A1 20190321;  
US 7993659 B2 20110809; US 8329197 B2 20121211; US 9161976 B2 20151020; WO 2004060319 A2 20040722; WO 2004060319 A3 20041104

DOCDB simple family (application)

**US 74801003 A 20031230;** AU 2003300184 A 20031230; CA 2511538 A 20031230; EP 03800433 A 20031230; EP 12174375 A 20031230;  
EP 12174376 A 20031230; JP 2004564947 A 20031230; JP 2010181794 A 20100816; JP 2011015347 A 20110127; JP 2014017495 A 20140131;  
US 0341796 W 20031230; US 201113165916 A 20110622; US 201213657032 A 20121022; US 201514850529 A 20150910;  
US 201816166607 A 20181022; US 4987408 A 20080317; US 84588810 A 20100729